Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Gary & Marilyn Parker

50 Parker Lane

Fort Shaw, MT 59443

2. Type of action: Application to Change an Existing Water Right No. 41K 30125540

3. Water source name: **Sun River**

4. Location affected by project: The project place of use for irrigation is located in the S2 Sec 31, Twp 21N Rge 1W, Cascade County. The proposed new point of diversion is located in the NWSESE Sec 2 Twp 20N Rge 4W, Lewis & Clark County.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

Applicants propose to change Statement of Claim no. 41K 200628 by moving one of two diversions. Applicants propose to move point of diversion No. 1 from a pumpsite in the Sun River to a headgate for the Fort Shaw Irrigation District (FSID) canal on the same source. Point of diversion No. 1 (POD #1) is proposed to be moved from a pumpsite in the SWSESW Sec 31 T21N R1W Cascade County upstream 16 miles to a headgate in the NWSESE Sec 2 T20N R4W Lewis & Clark County. A pipeline will be used as a secondary point of diversion to convey water from the district canal to the Applicants' place of use. Point of diversion no. 2 (POD #2) is a pumpsite in the SENWSE Sec 31 T21N R1W. POD #2 is not proposed to change.

The proposed action, if permitted, would allow Applicants to deliver their private water through the FSID's canal system to irrigate their fields.

The DNRC shall issue a change authorization if an Applicant proves the criteria in 85-2-402 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

Dept. of Environmental Quality Website – Clean Water Act Information Center MT. National Heritage Program Website - Species of Concern USDI Fish & Wildlife Service Website - Endangered and Threatened Species

USDA Natural Resources Conservation Service – Web Soil Survey USDI Fish & Wildlife Service – Wetlands Online Mapper

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No Significant Impact.

The source of water associated with this change proposal is the Sun River in Cascade County. Per the Department of Environmental Quality (DEQ) Clean Water Act Information Center website, a large portion of the stream reach through which the Applicants propose to move their POD #1 is identified as chronically dewatered. The Department will impose measurement and trigger flow conditions to this change application, if granted. So long as the Applicants adhere to such conditions, no significant impacts to the dewatered condition of the Sun River are anticipated from the change.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No Significant Impact.

The DEQ website identifies the stretch of the Sun River the Applicant's diversion is located in (Gibson Dam to Muddy Creek) as not fully supporting aquatic life. Probable causes are listed as alteration in streamside or littoral vegetation covers, flow regime modification, sedimentation-siltation, and temperature. The probable sources include impacts from hydrostructure flow regulation and modification, channelization, and agricultural uses such as livestock grazing in riparian and shoreline areas. There is low likelihood that water quality will be adversely affected as a result of the proposed project. If granted, Applicants' old POD #1 will no longer pump water from the Sun River to their irrigated field and Applicants irrigation would continue using the FSID canal system, which has been in place for over 100 years.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No Significant Impact.

The proposed permit should not have a significant impact on ground water quality or supply. The original diversion, a pump, diverted surface water from the Sun River. The proposed diversion, if permitted, will also divert water from the Sun River. The Applicants

are proposing to move their diversion upstream, approximately 16 miles, to a headgate controlled by the FSID. The Applicants are proposing to use the FSID canal system to deliver the same amount of water to their field which has been irrigated from their original diversion, a pump in the SWSESW Sec 31 T21N R1W Cascade County.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: No Significant Impact.

It is not anticipated that the proposed change will have a significant impact on stream channels, riparian areas, or stream flows. The Applicants are proposing to move one of their points of diversion upstream to the FSID canal in the NWSESE Sec 2 T20N R4W Lewis & Clark County.

The FSID diversion works are already in place; therefore no impacts that haven't already occurred, are anticipated. Channel impacts, impacts to flow modifications, barriers, riparian areas, dams, or well construction are not expected.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: No Significant Impact.

The Montana National Heritage Program lists four Species of Concern, one mammal and three birds, within Township 21 North, Range 1 West. The common names for the mammal species is the Grizzly Bear. The three bird species are the Great Blue Heron, Chestnut-collard Longspur, and Bobolink. One special status species was also listed, a bird, the Bald Eagle. All construction associated with this permit is complete and the place of use has been previously disturbed by grazing practices; no impacts to any of these species are expected.

The USDI Fish & Wildlife Service Website lists the Pallid Sturgeon as endangered. It also lists the Canada Lynx, Grizzly Bear, Red Knot, and Piping Plover as threatened. It lists the Wolverine as proposed species and the Whitebark Pine as a candidate species. Although these species are identified in Cascade County because one may reasonably expect them to occur there, not all are necessarily found in the area of the project. Additionally, it is unlikely that the proposed action will displace the species. The proposed project is not located in designated sage grouse habitat.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No Significant Impact.

The USDI Fish & Wildlife Service – Wetlands Online Mapper shows a few small wetlands adjacent to fields but does not identify any wetlands within the Applicants' field. The Applicants place of use is not proposed for change and no impacts to wetlands are predicted.

<u>**Ponds**</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No Significant Impact.

This project does not involve a pond. No impact to wildlife, waterfowl, or fisheries is anticipated.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No Significant Impact.

No significant impacts to the soil profile are anticipated, the Applicant will irrigate the same acreage as has been done historically. The predominant soil type is Ryell Loam that is generally limited by seepage, rapid water movement and a low water holding capacity. The Sodium Adsorption Ratio is very low and should not cause saline seep. It is not projected that soil quality, alteration of soil stability, or moisture content will be negatively impacted by this project on the previously farmed place of use.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No Significant Impact.

Construction of a pipeline to the place of use associated with this project was completed prior to this application. Any impacts to existing cover will have already occurred. Normal weed management can be used to control noxious weeds potentially invading previously disturbed areas due to construction activities and no spread of noxious weeds should be associated with this application. It is the responsibility of the property owner to control noxious weeds on their property.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No Significant Impact.

No impacts to air quality or adverse effects to vegetation are expected as a result of this proposal; proposed POD #1 will use FSID infrastructure to gravity feed the historical irrigation system.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: N/A – project not located on State or Federal Lands.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: No Significant Impact.

No additional impacts are anticipated.

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: No Significant Impact.

No locally adopted environmental plans or goals have been identified.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: No Significant Impact.

The proposed action is consistent with historical agricultural practices in the area.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No Significant Impact.

No impacts to human health have been identified.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No_X_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No known impacts.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? **None**
- (b) Local and state tax base and tax revenues? None
- (c) <u>Existing land uses</u>? The Applicant proposes to irrigate the same fields and little change to state tax base or revenue is anticipated from the proposed action.
- (d) Quantity and distribution of employment? None
- (e) Distribution and density of population and housing? None
- (f) <u>Demands for government services</u>? **None**
- (g) Industrial and commercial activity? None
- (h) <u>Utilities</u>? The Applicants have historically irrigated the fields supplied by POD #1 using a diesel-powered pump. If authorized, a portion of Applicant's fields would now be irrigated by gravity flow from FSID infrastructure.
- (i) <u>Transportation</u>? None
- (j) Safety? None
- (k) Other appropriate social and economic circumstances? None
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:*

No mitigation or stipulation measures have been identified by the Applicant. The Department will require the Applicant adhere to trigger flow conditions in the Sun River prior to diverting water.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

No action alternative: Deny the application. This alternative would result in not authorizing the Applicants to move POD #1 from their pumpsite to the FSID canal headgate.

PART III. Conclusion

1. Preferred Alternative

The preferred alternative is the proposed alternative.

2 Comments and Responses

None Received.

3. Finding:

Yes No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action:

None of the identified impacts for any of the alternatives are significant as defined in ARM 36.2.524.

Name of person(s) responsible for preparation of EA:

Name: Douglas D. Mann

Title: Hydrologist – Lewistown Regional Office Date: 8/31/2020